MODERN SKI SYSTEMS

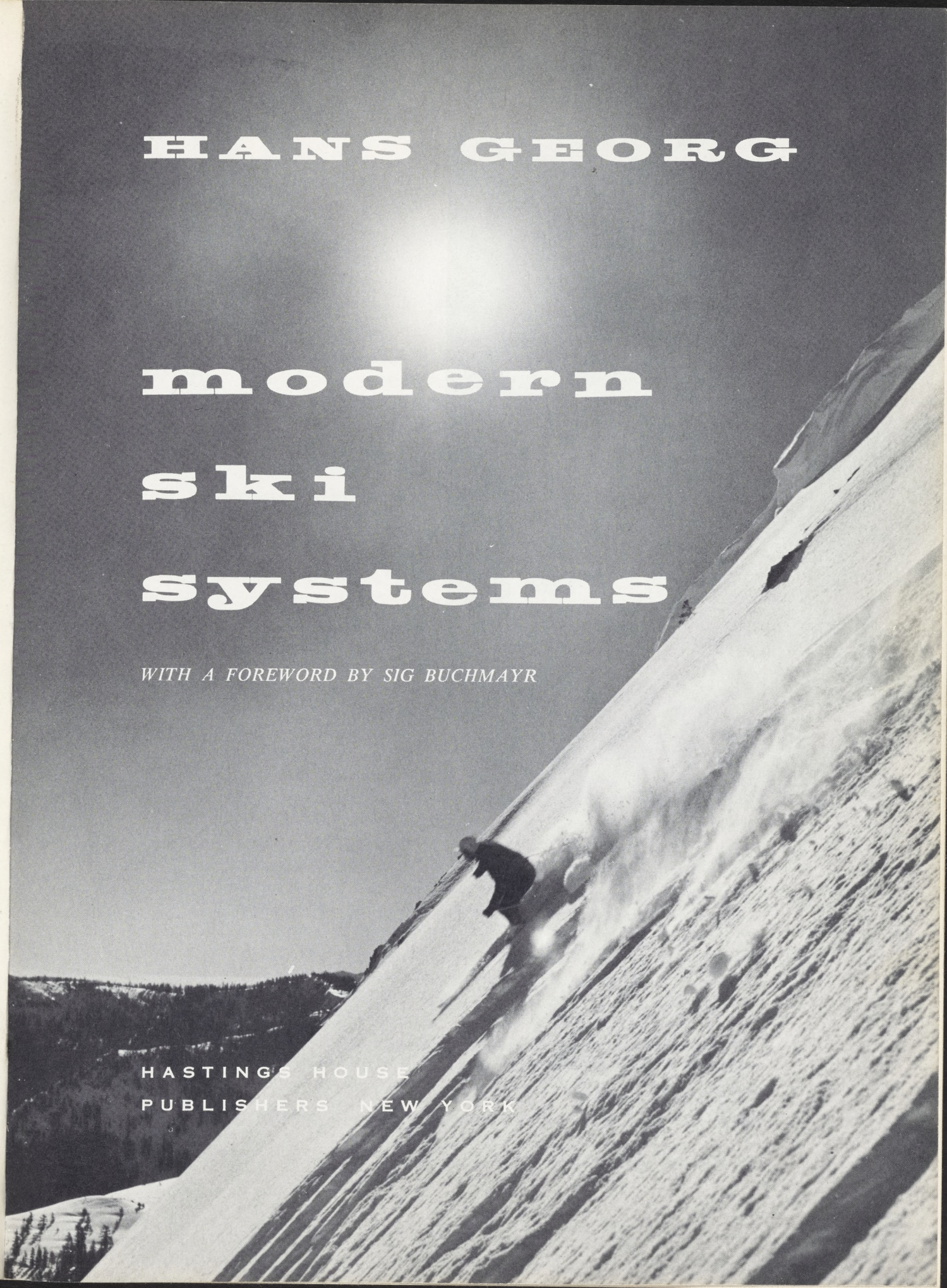
HANS GEORG MODERN SKI SYSTEMS

To Herb & Dodie
with best wishes
Hans

HANS GEORG

modern ski systems

WITH A FOREWORD BY SIG BUCHMAYR



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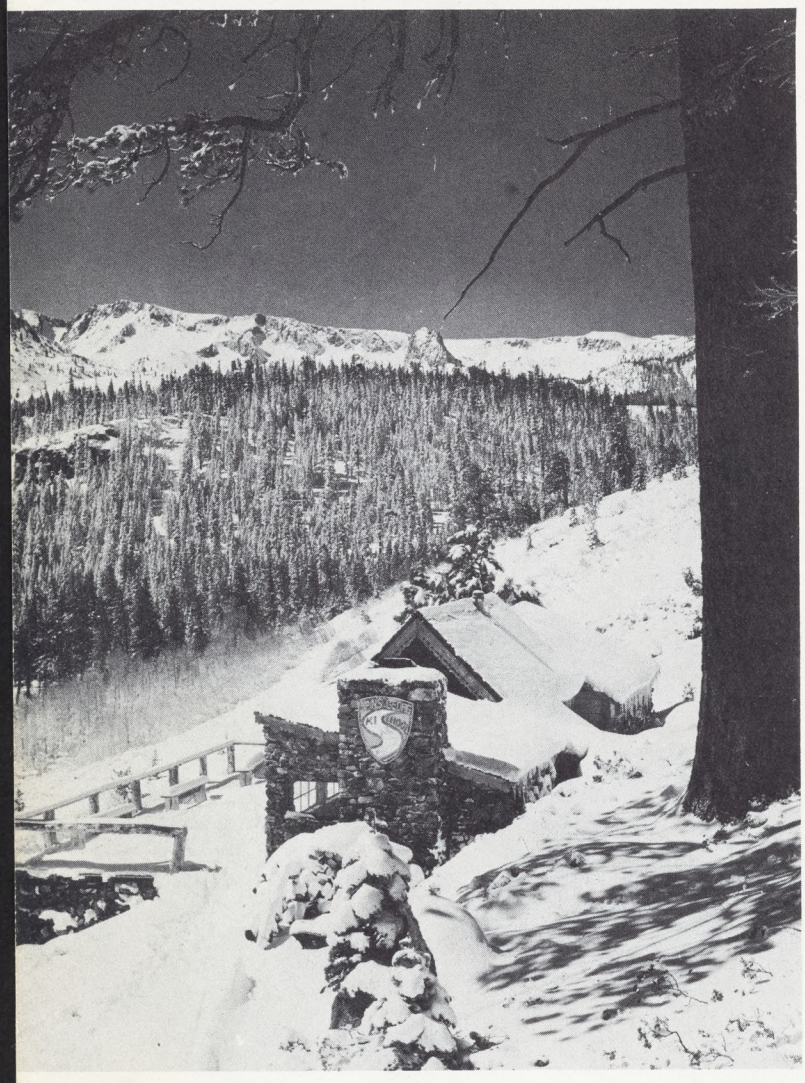

HIGH SIERRA, Mammoth Mt. Area

First Snow and a new life has
begun. Skiing is a way of
living for those who have taken
to the mountains.

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FOREWORD

In this country there were no ski schools prior to my own, started in 1928, and the few books obtainable from Europe were poorly written from a technical standpoint. Often the maneuvers could not be executed as described. Since then, however, more and more Europeans of skiing ability have come to the States and each who displayed the slightest advancement in equipment or technique was completely lionized. Therefore, unlike the Europeans who grew up with and helped develop a single technique, we had the advantage of learning, often the hard way, the merits of each.

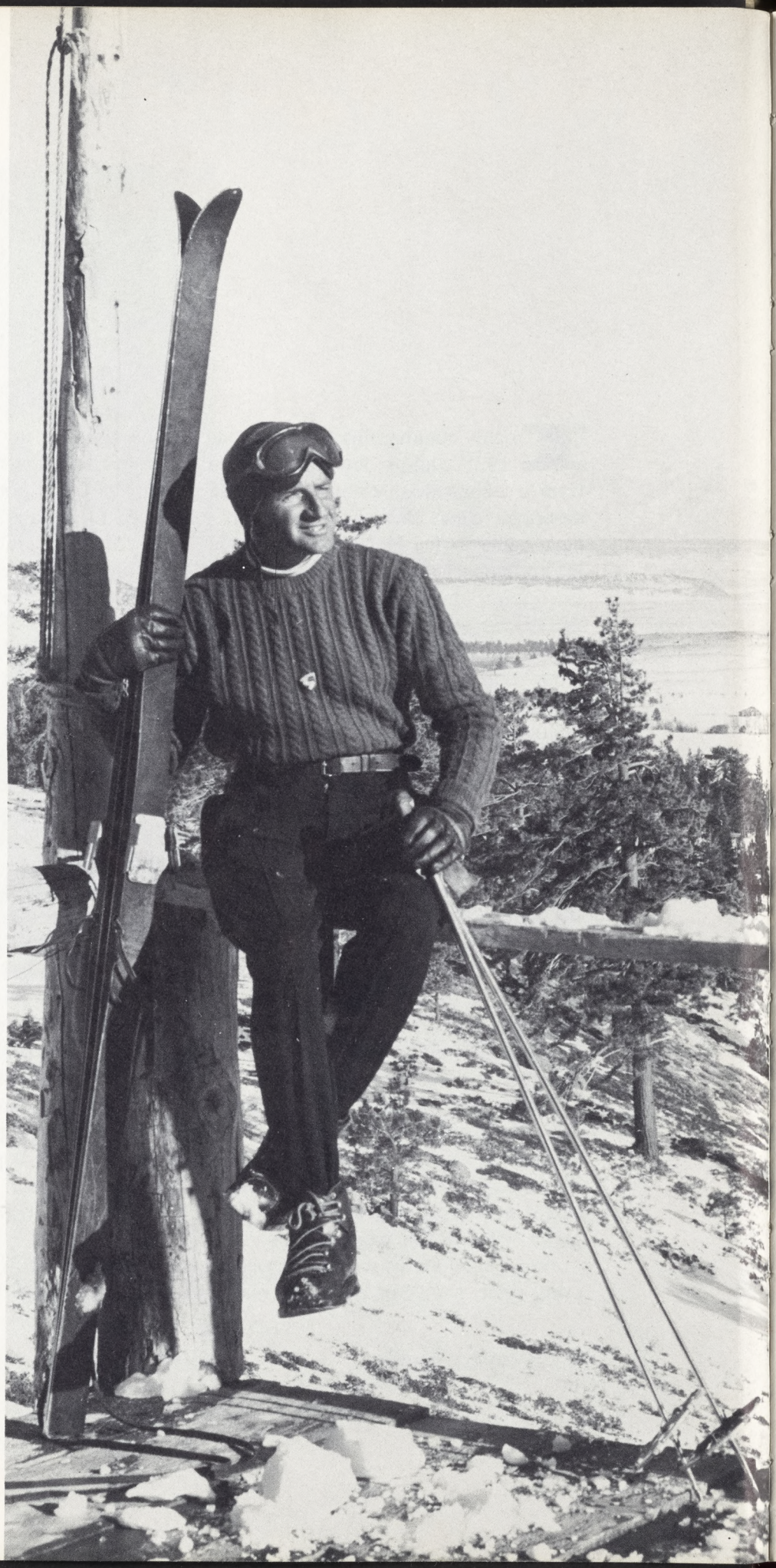
Therein lies the great value of the present volume by Hans Georg. No other author has had the personal knowledge to diagnose and explain so thoroughly all the ski systems. He came to America in 1937 direct from the famous ski school at St. Moritz where he served as an instructor. His passionate love of the mountains and the great outdoors prompted his mountaineering exploits through the length and breadth of the Alps, his solo all-ski climb of Mt. Whitney, his distinguished service in the Tenth Mountain Division, his eighteen-years of continuous service as a professional ski instructor. With meticulous care he studied and learned the Arlberg system at its source. Under Testa at St. Mortiz he studied and taught the Reversed Shoulder technique which he later introduced to America as a Semi-Parallel system; and he has written many articles and a small instruction book on it. He recognized the value of the French Parallel system and had the courage to go direct to its originator, Emile Allais, to study and learn the perfection of its dynamics and thus to completely "round out" his professional accomplishments. He is one of the very few professional ski instructors to have so well mastered ALL the recognized skiing systems.

Hans Georg presents these with remarkable fairness and without argumentative belligerency in favor of any one technique. A good skier needs reasonable mastery of every possible skiing method if he hopes to cope with the expected but unpredictable changes continuously met on a major ski slope or touring expedition. He needs a full bag of tricks, more than a golfer needs a full bag of clubs.

Hans has done us a great service. It should be especially worth while for every skier, novice or expert, to read and study MODERN SKI SYSTEMS.

SIG BUCHMAYR

Big Bromley, Vermont



HANS GEORG
Photo by Stephen Lukacik

modern ski systems

Come, sit down, relax awhile and let's talk about skiing. And by that I mean everything that goes with skiing—snow and mountains, the techniques and all the fun. With skis you can explore the white magic of the splendorous mountains; you can experience the thrills of a flight down the white slopes, the trails and ravines, down through the slalom flags or the spine tickling speed of a modern downhill race course. Or you can enjoy the complete relaxation of a cross-country trip to find inspiration from the ever changing beauty of the white mountain world. Mountains as a whole are similar the world over. I find the mountains of this country much resemble the Alps and it matters not should you go to South America, Australia, Norway or India—wherever mountains rise they are fascinating and for the skier they become a challenge and a delight. A certain accomplishment in ski techniques is a help, really a must, for full enjoyment of the sport, for greater safety and complete exploration of God's gift—the snow.

SKI TECHNIQUES

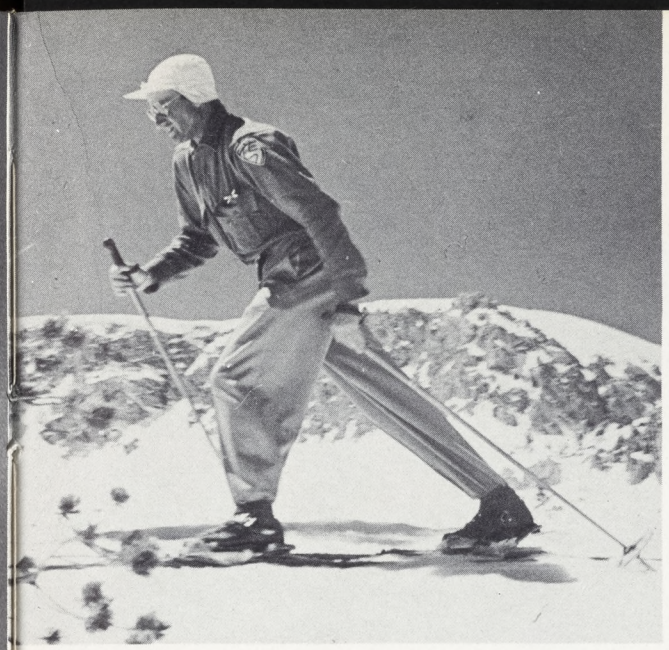
It's unwise to write about one technique and condemn another. There is a lot of good in each technique and sometimes terrain, snow conditions, or national pride has given popularity to one or the other way of skiing. There are outstanding pioneers in ski techniques such as Hannes Schneider and Otto Seelos for the Arlberg techniques and Emil Allais for the parallel approach, or the French technique. There are the many known and unknown contributors, the racers, the stylists, the instructors. All have a great thing in common—they all love the sport. It is a wonderful field to be active in. Let me pass on to you with camera and demonstrations the various approaches to this great sport.

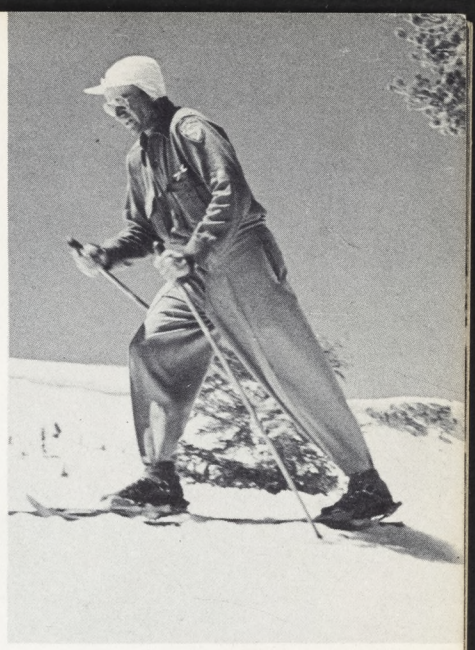
Anyone who walks can learn to ski, since walking on skis along the snowed-in trail is part of the sport. There is no limit to how much more one can learn since even the most expert try for even greater perfection.

It is not necessary to have the very best of equipment to start out with; it's like the little boy who at first catches fish with a willow stick and old string and hook. Once started you are on your way.

Every one can enjoy this.

Pattern of a good step.





Walking on the level is similar to normal walking, yet feet and skis are not lifted off the snow but slide forward by pushing knees well forward. Poles are used to give additional forward push and work alternately with the opposite leg.

When one is walking slightly uphill skis can be lifted off the snow to be set down hard after each forward motion to prevent back sliding.

The season begins at Big Bromley, Vermont

Facing Page:

When you get high enough the scenic beauty startles you.

To climb up steep slopes where space is limited you use the Herringbone. The pattern left in the snow explains the name. You walk on the inside edges which is achieved by the knock-kneed forward position of the knees. Skis are lifted with each step with ski tails overlapping in air. Poles help support and push your weight up, from behind.

A well planned upward trail eliminates a lot of hard work. Beginning with the lower picture, let's follow the skier up this little hill. (No! He couldn't keep up with the rabbit whose tracks are still fresh in the snow.)

Starting with a Herringbone in a narrow spot the skier then changes to a forward side step position. The upper ski with each step forward is set sidewards uphill and the lower ski simply follows the upper. One can zig-zag or traverse up any length of slope with the least effort. At the end of each traverse the kick-turn is used to change direction.

KICK-TURN

Starting with lower foot raise it and extend leg forward until ski end is close to tip of upper ski. Rotate lower ski, pivoting on ski end until it is parallel to upper ski, but facing new direction. Observe that balance is maintained by poles planted on uphill side.

Now bring upper ski and corresponding pole around together to be set down by the already rotated ski into the new direction.

FALLING CAN BE FUN!

When you fall, roll onto your back, get skis out of snow and turn them in the air until they become parallel.

Bring skis below you and horizontal before getting up.

SQUAW PEAK

Naturally, modern facilities such as chair lifts and other uphill conveniences eliminate a lot of climbing and provide countless downhill runs.

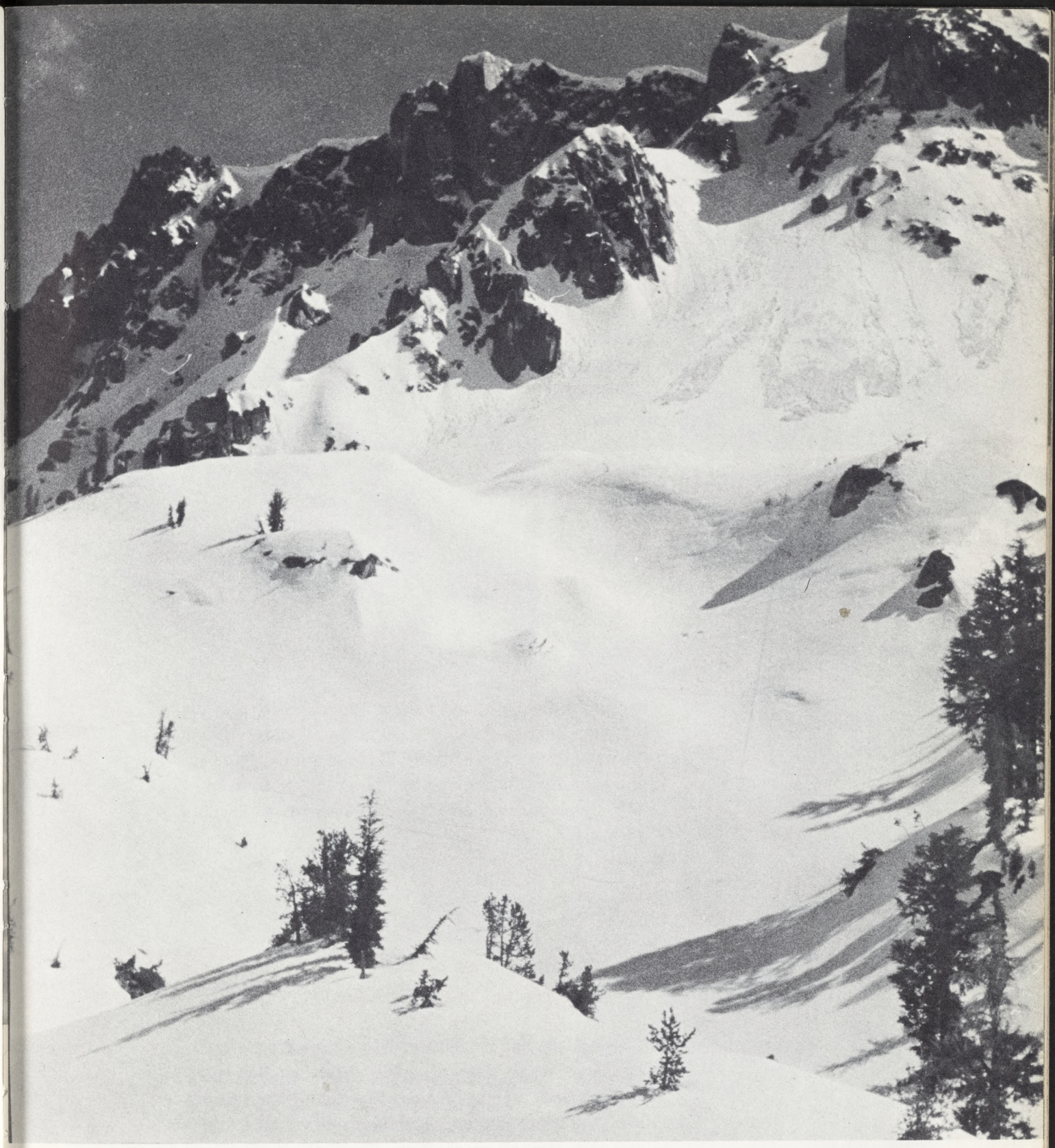
BIG BROMLEY

The normal downhill running position should be a relaxed one. Your weight is resting on the balls of your feet. The upper body is slightly bent forward and with a rounded back. Elbows slightly raised and hands rolled inwards to support poles pointed to the rear. Knees and ankles are supple, acting as springs, ready to bend forward for any variation of terrain and when you wish to turn to "spring" into action.

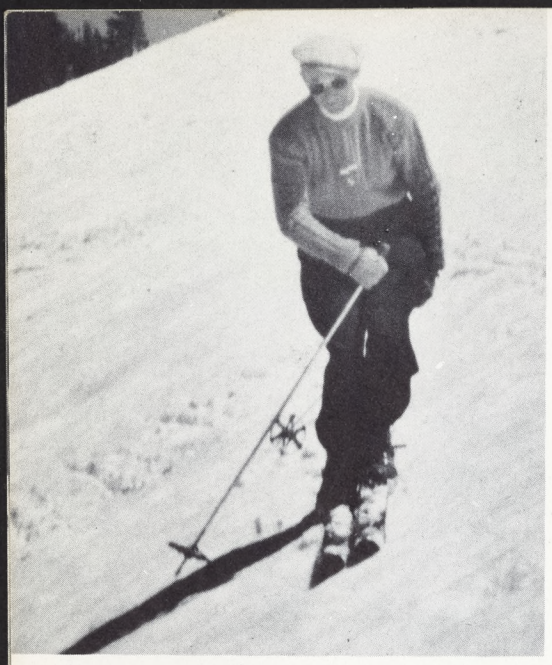
The steeper the slope, the more forward kneeling is required. It is the same motion you go through later on when making a downhill turn. You sink when you reach the steepness of the slope.

You adjust your forward lean and knee and ankle bending according to the terrain. On a steep slope you lean more forward to keep your body plumb with your skis. In the level transition you should rise and arriving at the bump your knees and ankles will bend or practically retract to give your upper body a smooth ride and keep it at the same level.

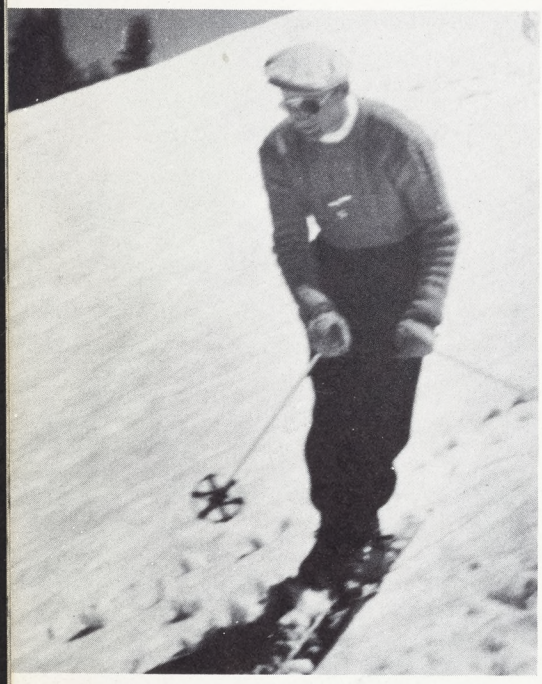
Traversing downhill you keep your body plumb over your skis, with two thirds of your weight on the lower ski. Any beginner can traverse down a mountain side, choosing a line following the terrain to a natural stop on a slight up-grade, or counter slope. While yet a beginner, you can use a kick-turn to change direction and thus enable you to start down the opposite way. Just zig-zag your way back down. Keep arms and hands slightly extended forward and away from body for better balance and forward lean. Take care, however, that ski pole rings do not catch in tree limbs or brushes.



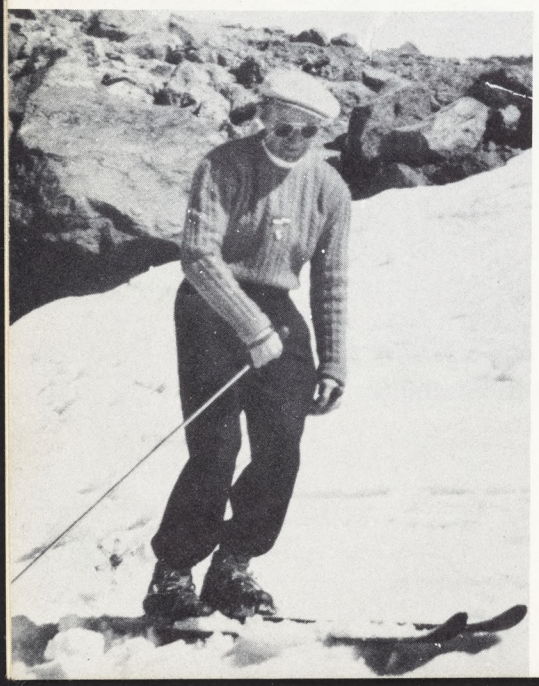
This is typical terrain with dips and counter slopes. Every one can have a lot of fun if he chooses his downhill trail wisely and according to his ability.



This is the correct downhill traversing position, with body plumb over skis, lower arm forward and upper arm near hips. From this position the arms can be used quickly for a windup position, in preparation of any turn. Uphill edges of skis have a good bite on slope with skis normally in horizontal position.

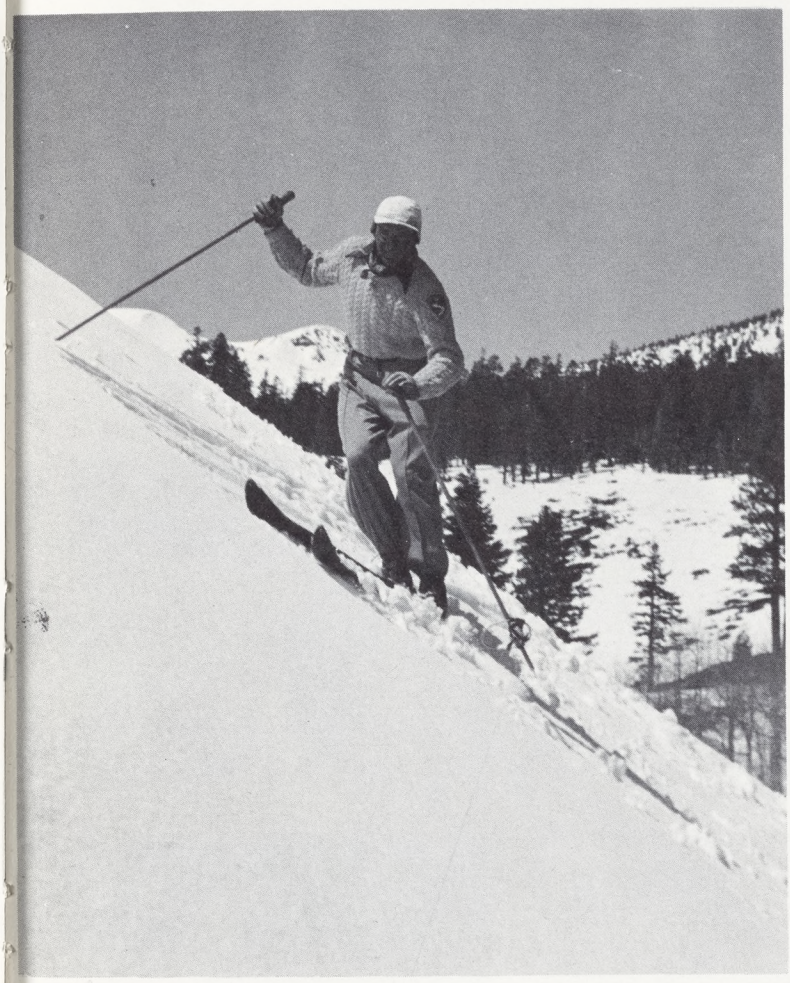


Relaxing the edges and flattening the skis by pressing with the knees slightly forward downhill and a leaning forward of the upper body will cause a forward downhill side-slip. Elementary routine to negotiate steep or narrow slopes and also basic to start off a downhill turn.



The side-slip can be checked by pushing knees slightly uphill to regain bite of uphill edges on the slope. Settling body weight on heels by relaxing the forward lean will bring skis into a position horizontal to slope and thus stop all momentum. Handling your traverse and side-slipping in this manner you can gain full control of the steepest incline.

Since the controlled side-slip is the basic approach to parallel skiing it has to be practiced by the beginner in its most elementary stage; just learning to flatten the skis and to make them grip again; the relation of the upper body to the motion of the skis; to gain forward, backward and, most of all, lateral balance.



A beginner may use the upper pole to stabilize himself when practicing the side-slipping. With the pole he can push himself into the side-slip and maintain a plumb position of the upper body over the skis. Then he tries the same without help of the pole. He should flatten the skis and stay with them, keeping the lateral balance.

Typical mistake of side-slipping: upper body leans into the hill while hips try to press skis down hill. There is also too much weight on uphill ski, causing lower ski to slip away and skis will separate.

The speed following a fast traverse is controlled with a parallel uphill check or a so-called uphill Christy. The upper body leans way forward to put pressure on the front of the skis, which get a good bite or grip into the slope, while the unweighted ski tails lose their grip and slide downhill.

From a traverse go into a controlled side-slip and uphill turn: lean forward and by so doing drop your downhill elbow well forward toward your downhill ski tip. Keep upper arm back near hips. Your front edges will get a good bite into the slope while your ski tails will start to lose traction and slide. Now you can rotate and surprisingly you will thus be able to perform an uphill Christy. Take the steps as below:

IN PLACE DEMONSTRATION:

Wind up or counter rotate by bringing your outside shoulder, elbow and pole well backward. Inside arm and elbow are over front of skis, elbow slightly raised, knuckles forward.

Rotate your arms and poles freely with outside arm describing a wide circle and inside arm rotating close to hips.

When arms are about 90 degrees to skis or even with hips, block your hips, and by bending in your ankles sink straight forward.

The remainder of your rotation will carry you around in your turn. Your rotation ends when your arms and elbows are in the same position as in above controlled side-slip.

IN MOTION:

ROTATION-WEIGHTENING-BLOCKING

In previous descriptions it is noticeable that if the rotation is well timed with the other forces as shown in the controlled side-slip and uphill turn without rotation, where the weight distribution and edge control are the main factors, the full benefits of ease in turning are obtained. So, let's talk more about a good rotation and its most efficient execution.

The better the windup the better the rotation. You wind up, or counter rotate, the same as you wind up a spring or watch to generate momentum. Therefore you bring the elbow of the outside arm as far back as possible. Then you start to rotate, the same arm describing a wide circle and the inside arm a short circle close to the hips. The wide circle of the outside arm will create the centrifugal force which, when transmitted through the blocked hips to your skis, will carry you out and around in your turn. The arm rotating as far out as possible will carry weight of the skier's upper body to the outside ski, thus automatically accomplishing the shifting of weight to this ski during the progress of a turn.

In fact beginners can practice making the turns on the outside ski by lifting the inside ski off the snow while turning. This will enable them to counteract that common mistake of skiing—leaning too much on the inside ski.

The motion of your arms in the rotation should follow closely the horizontal with hands at height of your hips to be most efficient. You don't swing up or down with your arms but let the kneeling or bending forward in the ankles lower your outside elbow over the skis toward the end of the rotation.

The first part of the rotation we call a free rotation. You rotate your arms and shoulders freely, not expecting anything else to turn. It's just like starting a car with the clutch disengaged but as soon as the motor has gained momentum you engage the clutch and let the motor turn the wheels. It's the same with your rotation. Gain momentum (your "free" rotation) until your arms are about in a 90 degree angle to the skis, then block your hips and with the continuing latter part of your rotation you make your whole body and skis turn also. By "blocking" the hips it is meant that they are not twisted to the ouside by the rotation of the upper body. They stay completely fixed at a square angle to the skis.

Blocking of the hips and kneeling forward by bending the ankles is done at the same time. It is done at the critical moment when you wish to peel off from the traverse towards the fall-line.

PARALLEL

DOWNHILL

CHRISTIANIA

Wind up from high, relaxed traversing position:

ROTATE!

Block your hips and SINK forward bending in your ankles. Forward kneeling has flattened skis momentarily and made tips drift downhill towards fall-line.

Edges have changed, inside ski is pushed forward. Hips are blocked and square over skis. Rotation of upper body is solidly connected now with skis, which in return follow the last part of the rotation of the arms and shoulders.

The finish of the turn is same as uphill Christy on following page.

To link a new turn straighten up by relaxing, kneel and wind-up as shown in first photo on top of page.

Photo by Max Kolb

As shown in the photo above it is necessary to turn as one unit, with your hips square over your skis throughout and to the finish of the turn. Unfortunately, too many expect the skis to turn, when all they have done is to windmill around with their arms while twisting in the hips and knees.

HIGH-SPEED TURNS

In long high-speed turns, as in photo, the skis travel in a steep downhill track close to the fall-line, and there is little side resistance to overcome at the critical point of starting and linking turns.

However, the more gradual your traverse and shorter the radius of the following turn, the more you will have to overcome the side resistance of your skis in the snow. Besides there is the problem of changing edges for a quick vigorous turn or flattening them out for a long radius, drifting turn.

In the Arlberg system the stem is used at this point and in the French system the "Ruade" or, generally speaking, a lift to reduce the friction and side resistance of the snow.

THE RUADE

The main routine of the French parallel system was originated by Emil Allais.

The Ruade is a bucking motion whereby the tails of the skis are retracted and lifted off the snow to allow them to turn in air, propelled by the momentum following the free rotation, towards the fall-line. The critical point is overcome by thus eliminating the side resistance of the snow while coming out of a shallow traverse. Moreover it serves to put the skis in a more favorable position to drift towards the fall-line by having their edges changed or flattened while off the snow.

The timing of the Ruade is added to the one of blocking and kneeling—all three being necessary to start the actual turn right after the free rotation. In the Ruade the upper body stays at the same level and does not rise. Only the legs are retracted while the upper body actually sinks forward to settle down in this position when skis are lowered again. It must be understood that the Ruade is done quickly so that the skis are back on the snow before going through the fall-line.

Wind Up!

Rotate and Retract!

Sink and kneel forward!

Keep rotating and turning as one unit.

Relax, kneeling again to regain high approach and new windup position for the following turn.

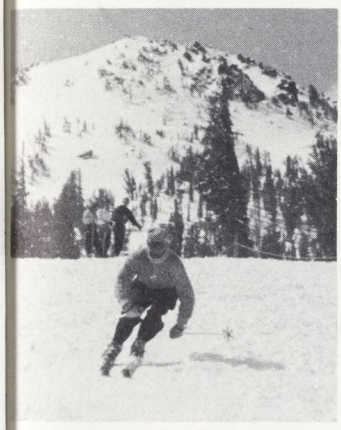
The Ruade is a sideways offsetting of the skis in their track, of about six inches, to steepen the angle of traverse or approach to the turn.

In hard snow or icy slopes the skis are set down hard after the retraction to gain a good grip on the slippery surface. In soft or deep snow the ski tails are lowered softly, simultaneously with the sinking of the upper body, to cushion the impact and prevent additional digging-in of skis into the snow.

When skiing mugels (bumps) and ruts, the Ruade is done at the moment the ski tips reach the ridge of the mugel; ski tails are then retracted and set down on the other side of the ridge to allow the skis easily to slip into the rut and ski through it without being carried too far across to hit the ridge or mugel on the other side.

It is necessary to understand that the Ruade, or lift of the skis, is just a preparation for the actual succeeding parallel Christiania turn. It is a maneuver with parallel skis and body always plumb and centered over the skis while skis are manipulated to bring them in the most favorable position to follow through with a parallel Christiania turn.

Wind up from high and relaxed position—Rotate!



Block and retract ski tails—Ruade!

Sink and kneel forward and follow through with parallel Christiania and rotation.

ONE POLE RUADE

For very short turns where space is limited and utmost control is required.

Wind up and rotate, but set your inside pole in the snow as support and pivot at the moment of the Ruade, or retraction of legs. Sink . . . and follow through as in other parallel turns.

Notice sidewards displacement of skis with the Ruade.

From a slow start or when a turn is to be made immediately from a near standstill.

Two poles are inserted as support for the Ruade. There is no windup or free rotation to start turn.

After retraction of legs and sinking down you simply follow through with rotation of arms to complete parallel turn.

TWO POLE RUADE

SNOW

Different kinds of snow require different kinds of skiing. It's a never ending challenge the snow puts up to the skier. There is light and heavy snow; deep, or an ideal few inches of new snow over hard pack; there is icy snow or corn snow. The snow changes during the sun hours and freezes in the shade or at night. All this makes skiing most exciting even for the most accomplished skier who continually finds new or unexpected conditions and is trying to master them. This may be why ski techniques always change and none will ever be universal.

Photo by Max Kolb

In deep and heavy powder you have to rotate more, feel out your snow. With the windup rock back on heels and bring ski tips to surface. Rotate and at blocking point rock forward with the kneeling motion. The outside arm of the rotation has to swing to its full extent. In tricky snow lifting of inside ski may help all through the turn. Only on gentle slopes and long radius turns is it preferable to ski with weight on heels to keep tips out of the snow throughout the turn.

Ruades in deep snow are executed with lifting or retracting the skis horizontal to the surface and not the usual pivoting on the tips.

RUADES OVER BUMPS

Approach high and "wind up" upper body.

Rotate and retract ski ends when tips reach the ridge of the bump.

Sink and kneel forward on the other side of the bump while finishing turn.

Straighten up to be ready for another bump or turn.

Combination of Ruades and pure parallel Christies.

Wind up!

Rotate!

Retract or lift slightly!

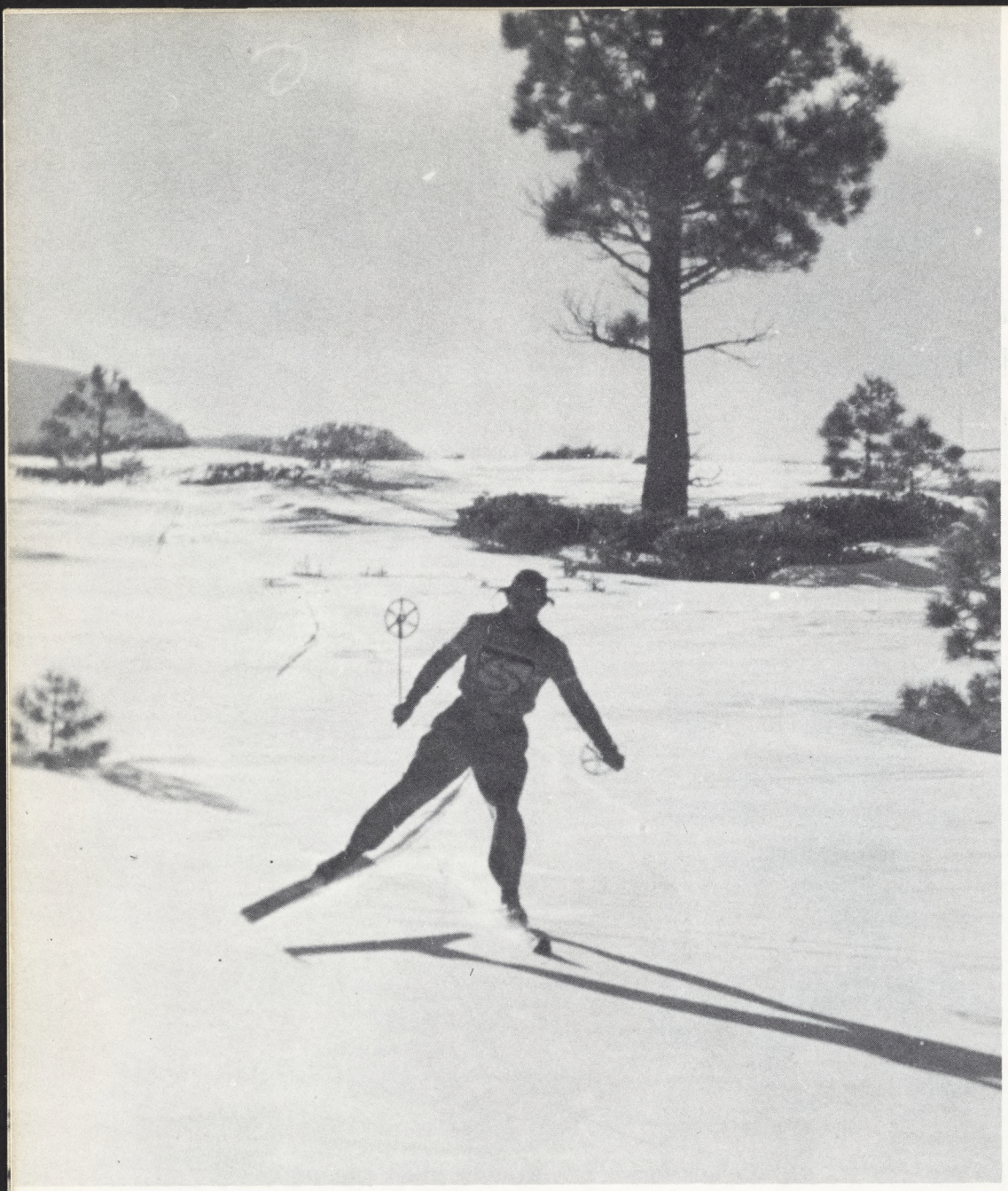
Sink forward by bending knees and ankles.

Follow through with rotation which becomes . . .
. . . your windup for following turn.

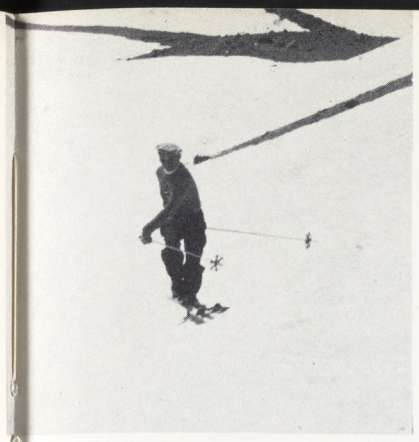
Rotate and sink forward.

Follow through with your rotation.

Straighten up for approach of next turn.



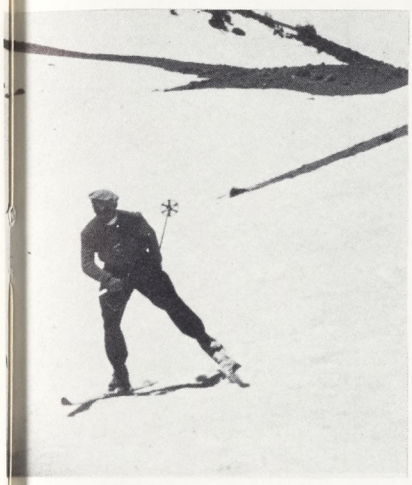
The Skating Step is done to accelerate your speed on gentle slopes or transition of terrain. It is also used to change direction by skating off only to one side or the other. For beginners it is a fine exercise to obtain balance on one ski. It can be simply executed by pushing off from the ski you are resting on and skate out with the other, transferring your weight on over it, then lifting the first ski out of the snow and bringing it in for the next skating step. Windup and rotation of the arms, the same as a speed skater uses, can improve the momentum. Pushing with both poles may also be of help.



← With Rotation

Without Rotation →

Wind up when getting set to push off.



← Unfold rotation over out-skating ski

← Bring ski in with tail over gliding ski at the end of rotation and prepare for new push off.

Photo by Beth Chasse

THE STEM POSITION

The Snowplow is the basic stem position called also "doppel stem", since the ski tails are stemmed out or pushed out while the ski tips are held close together. In running straight down the slope the snowplow is used to break speed with its snowplowing effect. It is used as a basic turn for the Arlberg system which derives the following stem turn and stem-Christiania from this position. In the French parallel system the snowplow is also taught, yet not as basic for any of the other parallel turns. The snowplow in the French system can be taught at any time just as a position and maneuver by itself. It is unquestionably a fine position for beginners as a platform on which balance is easily maintained while learning the movements of rotation. It is considered best, however, in modern skiing not to let the pupil become snowplow happy.

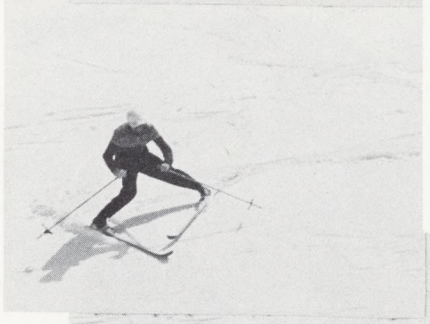
In all the parallel systems stem turns and stem-Chistianias are not taught at all since it is believed unwise to learn something which every one tries to discard later on when reaching the common goal of skiing "parallel."

STRAIGHT SNOWPLOW

ROTATE

ROTATE

WIND UP



ROTATE

WIND UP

ROTATE

The snowplow position is created by pushing the heels out and keeping the ski tips together. The forward bend of knees and ankles provides natural inside edging of skis.

For the turn the upper body provides the momentum by rotation.

The hips stay square to the skis, or in a blocked position, to transform the rotation of the upper body or shoulders and arms down to the legs and skis.

A free windup to gain momentum for the rotation can be used. The shoulders swing further back than the hips.

As an exercise for blocking the hips you can hold your knees with your hands and with your thumbs alternately push your knee joint forward with each rotation of your shoulders.

You will thus create a great unison between the movements of your upper body and your skis.

However, without this stunt, in this exercise, don't forget to add some free rotation at the beginning of each turn.

THE STEMS TURN

From a parallel traverse . . . Wind up or counter rotate your shoulders and let lower ski stem downhill to create a semi-snowplow. This stemming position of lower ski is also referred to as counter stem.

Rotate same as in snowplow turn.

After going through the fall-line or straight down the slope,

INSIDE SKI

OUTSIDE SKI OF TURN

the weight shifts to the outside ski which becomes the downhill ski and the inside ski drifts parallel and half a foot ahead towards the lower ski, until they are close together again.

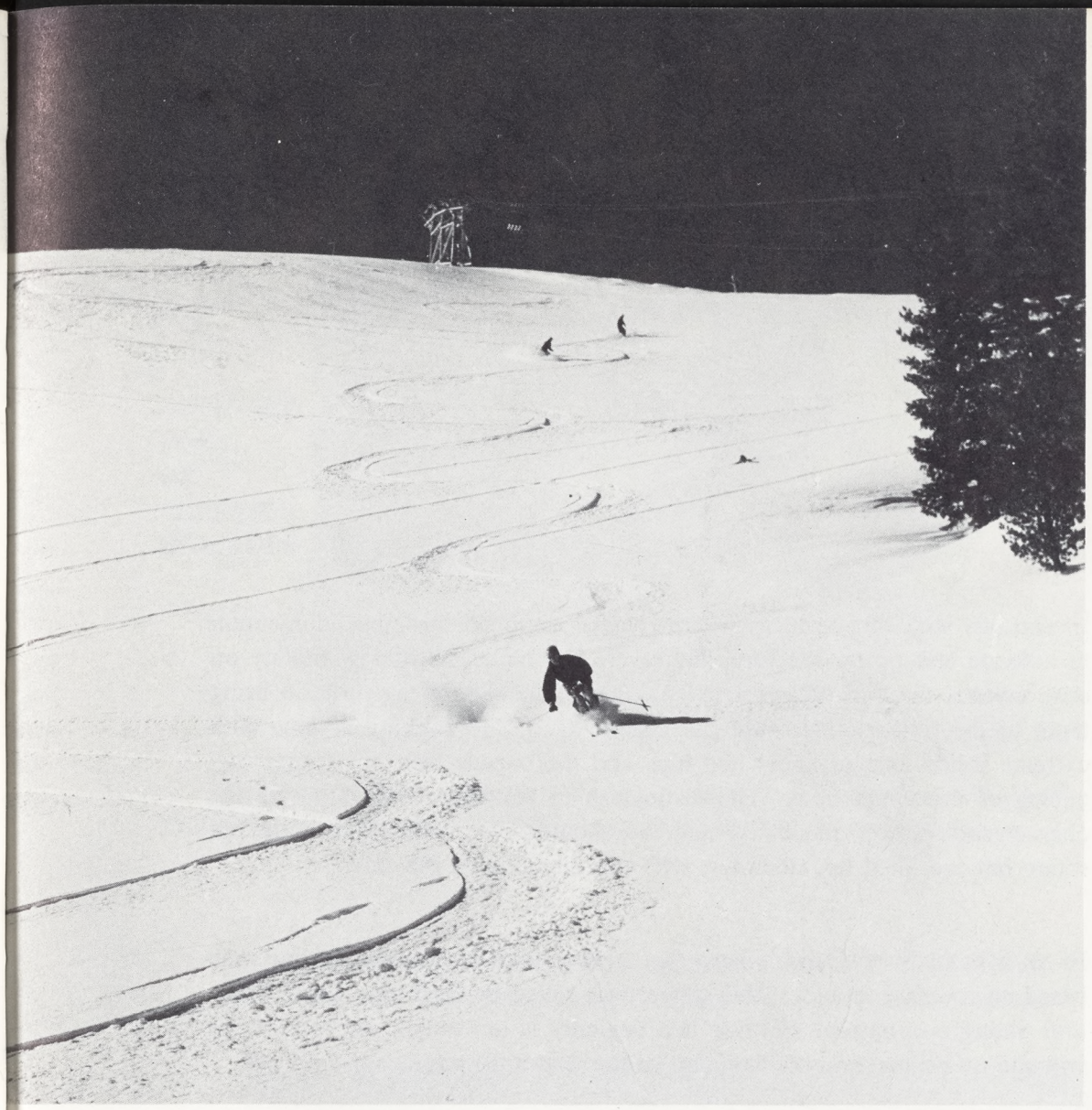
THE STEM CHRISTIANIA

With the knowledge of good rotation, the slight stemming of the lower ski becomes rather a natural motion to give the upper body more freedom and stability for the windup. The lower ski tail merely drops down as a platform from which the following rotation and weight shift to upper ski is performed. The more the stemming is discarded the closer the turn will be to a parallel or a parallel Christiania.

Wind up and let lower ski tail drop down into stemming position.

Rotate and shift weight to outer ski and drift inside ski back into parallel position while progressing towards the fall-line.

Finish the turn with inside ski half a foot forward, the usual kneeling forward lean, with outer arm well forward and inside arm behind hips.



All turns with rotation have the common gracefulness of tracks, and fluid elegance of motion and momentum, linking one turn to another in perpetual rhythm as the skis glide through the snow propelled by the rotation of the upper body.

THE REVERSED SHOULDER TURNS

In contrast with all the turns where rotation supplied the main momentum to activate and power the turn, the reversed shoulder turns rely mainly on edge control through exaggerated banking of the skis in the turns to bring them to the fullest extent onto the inside edges. The banking is done with extreme inside lean of knees and hips and the outside lean or counter balancing of the upper body. The distinguishing features of the turn are the characteristic arc of the body, and the shoulders and arms which do not rotate but are lined up, sideways, with the direction of the skis.

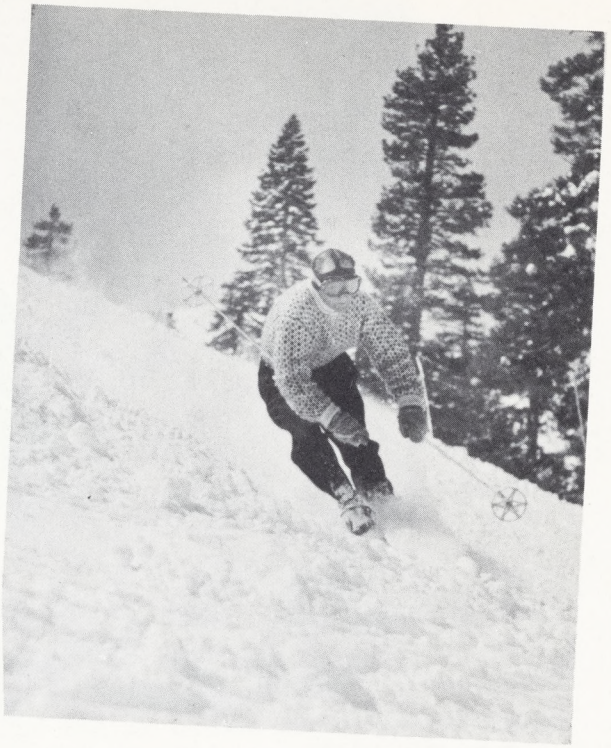
In St. Moritz, Switzerland, where the entire school system was at one time based on reversed shoulder, this system was called by Giovanne Testa, "Natural Skiing"—a natural, because if a beginner is not taught the rotation he will end up skiing reversed shoulder, or the "natural" way.

Racers have used the reversed shoulder for quite some time. Unless, in a slalom course, all the gates are set up in rhythmical succession, whereby left and right turns follow each other, the racer would be short of time to prepare each turn with a windup for the rotation. Therefore, slalom racers ski more with their hips and knees and ankles to steer and bank the skis into the turn and use the shoulders merely to counterbalance and steady the motion of the lower body. In high speed turns on a downhill course the skier runs close to the fall-line and does not need the added momentum of windup and rotation; in fact it would be obstructive to his balance. He has to stay "in line" with his upper body to the speeding skis and forward momentum, banking into turns with knees and hips, using the upper body and shoulders only as counterbalance. Furthermore, the banked and edged skis have a better grip on the hard packed slalom course, lending more control and precision to cut the gates.

ROTATION TURN OR REVERSED SHOULDER

Rotation provides momentum for this parallel turn. Notice that outside elbow comes well forward to provide maximum effect of a good rotation.

While in the reversed shoulder turn the inside elbow and shoulder stays forward, knees and hips lean into the turn and upper body counterbalances.



This traverse is checked with an uphill turn in reversed shoulder position.

Knees and hips lean or bank uphill while the upper body counterbalances and leans forward downhill. Edges of front of skis bite into the slope while ski tails, being unweighted, slip.

For average skiers or beginners, the starting of a reversed shoulder downhill turn and the linking of turns, may be a little difficult. There is no free rotation to activate the turn. The turn can be started with a slight stem, a Ruade, a general uplift, or a drift with flat skis to be followed by the banking of knee and hips into the turn. The shoulders counterbalance and only at the last part of the turn, after going through the fall-line, the backward shoulder may move slowly forward with a delayed shoulder rotation for a smoother finish of the turn and also to bring this shoulder forward and in line with a new turn into the opposite direction. Since there is a tremendous amount of kneeling done in each turn, merely a straightening up of knees and ankles between turns is sufficient to reduce friction of skis to change edges and start a new turn.

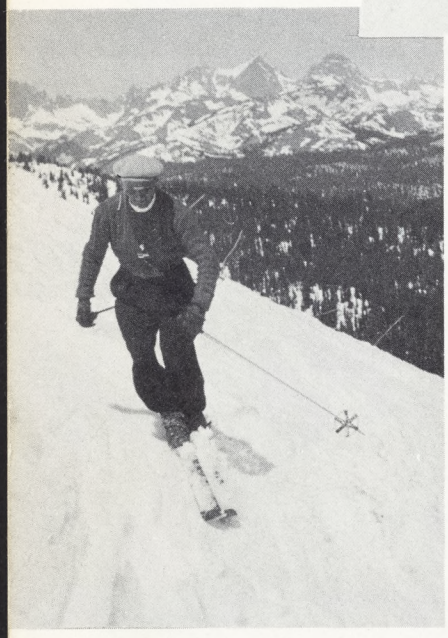
Especially when making turns close to the fall-line, the change of edges is very rapid and skis are rolled from edge to edge by whipping the knees and hips from one side to the other in a quick succession of lifts in between. Poles are used for the timing of the lift or as pivot.

Below are three typical stunts of a reversed shoulder racer. First photo shows the banking of knees and hips and the counterbalancing arms and shoulders. The second shows change of edges and direction with help of poling. The third shows the moment skis are rolled from one edge to the other while knees and ankles straighten to reduce pressure and friction.

REVERSED SHOULDER TURN

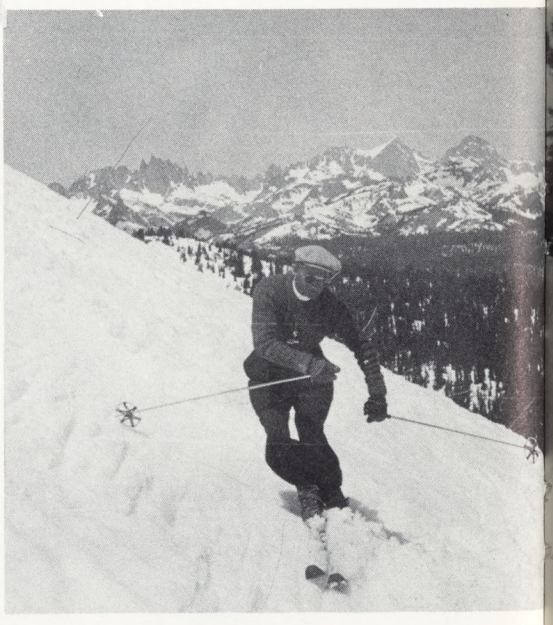
From a downhill traverse one can easily experience the difference of an uphill stop or uphill turn by means of rotation or by means of edge control through the reversed shoulder position. In the rotation turn, the skis are held fairly flat to allow the momentum of the rotation to swivel the skis around. While in the reversed shoulder position the skis run on the edges by the banked-in knees and hips while the upper body is leaning out to counterbalance. Weight on the front of the skis makes the front edges bite more into the hill to lead the uphill turn.

From a downhill traversing position . . .



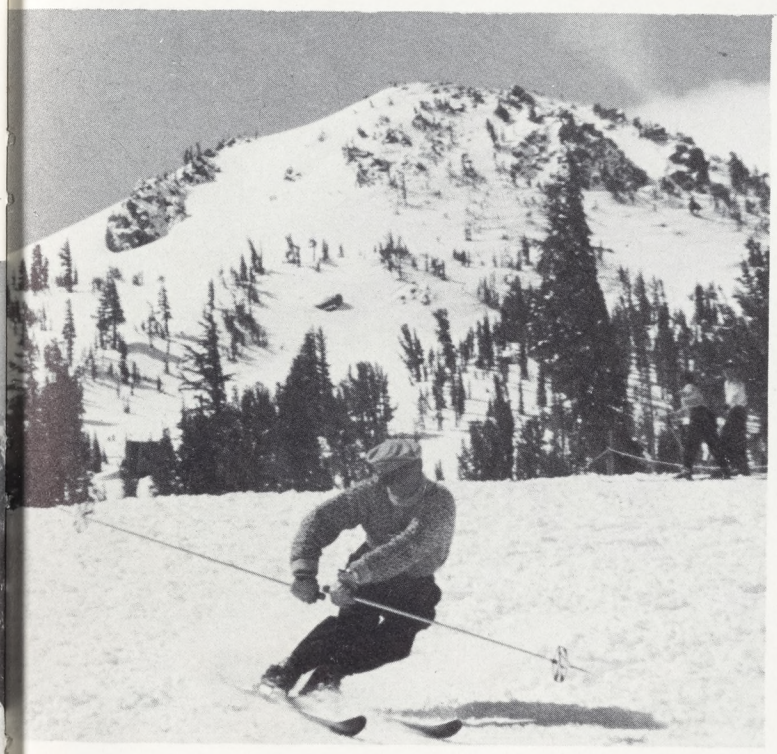
Rotation of the arms and shoulders and forward pressure swivel the skis to an uphill turn.

Knee pressure uphill and forward make the front edges bite into the hill to guide skis into uphill turn, while upper body leans "out" to counterbalance.



Practice side-slipping and coming to an uphill stop with knees and hips leaning forward uphill and arms and shoulders counterbalancing and leaning out from slope.

In reversed shoulder downhill Christiania observe the banking of knees and hips inside the turn and the upper body, arms and shoulders counterbalancing. The body forms an arc, and shoulders are in line with skis.



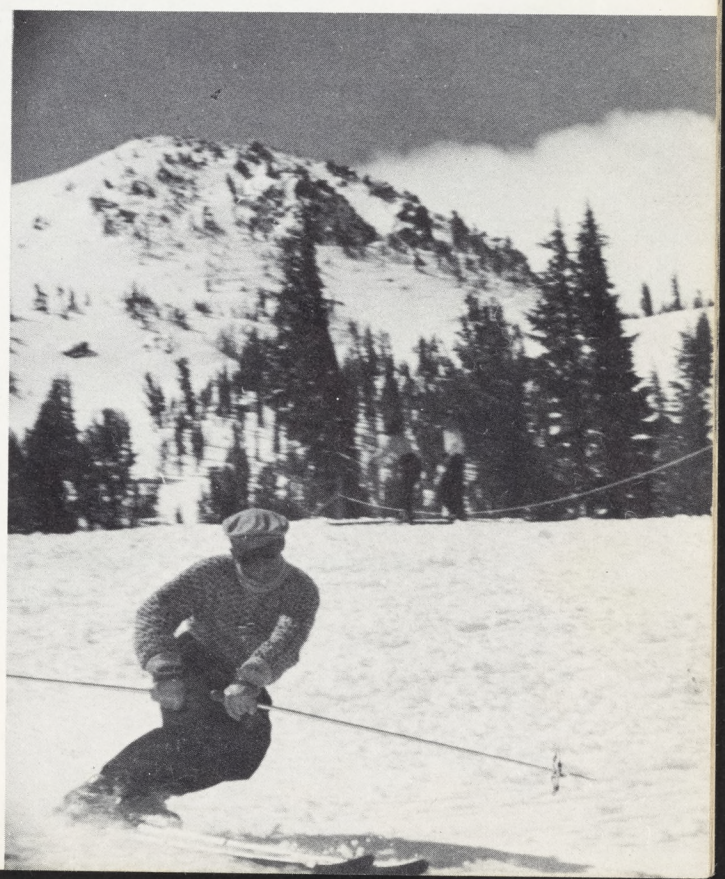


Photo by Bill Briner

A young Maestro of the Reversed Shoulder is ten-year-old Jim Hugo.

In the conventional highspeed turn the whole body is plumb over skis which are banked into the turn by banking body. Inside ski is ahead as is inside shoulder. Speed, not rotation, provides the momentum. Front of skis has a firm bite in the snow by forward lean of whole body. Ski ends are unweighted, offer little resistance and swivel slightly. Pressure on flexible ski fronts may arc them, in such a way they steer a natural curve.

Photo by Hubert McClain

The delayed shoulder rotation is added to give a smoother finish to the turn by bringing the outside shoulder slowly forward. The skis are well banked, riding the edges. They have passed the fall-line while the outside shoulder is still delayed in its forward movement.

SLALOM

Practicing until the shortest and fastest line between gates is mastered. A champion skier never gets tired of it. Jill Kinmont practicing.

Photos: Stephen Lukacik

A National Women's and Junior Slalom Champion, Jill Kinmont is relaxed and playful. Skiing is easy, isn't it?

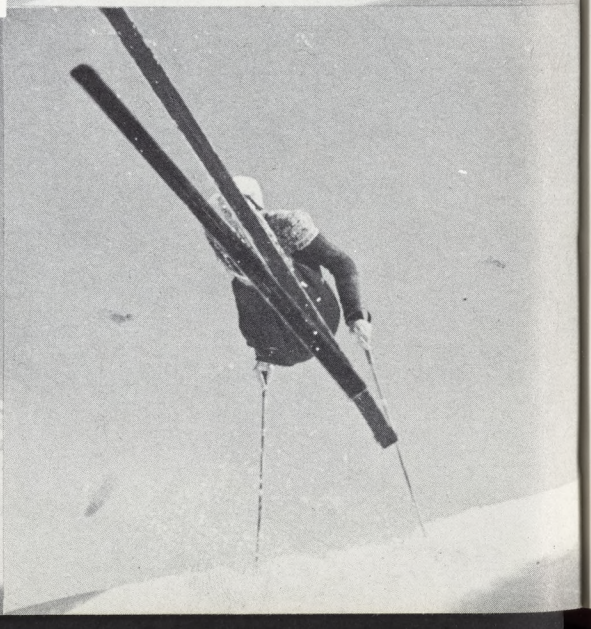
Jump Turns are executed in broken-up terrain, over snow overhangs on cliffs or in very bad crusty snow. The one pole jump turn is the most frequently used.

The pole serves as support and pivot enabling the skier to rise up and retract the legs and skis to clear the snow completely and turn in the air into the direction desired. By this maneuver one can turn a full 180 degrees, but only at a slow speed.

At higher speed the skier can use this maneuver, the same as the Ruade, to turn only a few degrees in the air and settle back down in the snow in a more favorable angle towards the fall-line to complete the turn as a Christy.

It is also done to negotiate large bumps in the path of a turn, by letting the bump lift the skier.

Pole-Vault Jump between two poles is a spectacular way of changing direction in very bad snow or when negotiating obstacles or precipices where space is limited. Two poles are used to lift body up and retract legs and skis out of the snow. Once up in the air legs are raised forward and skis turned in air 90 degrees.



Jump turn by the Author

Photo by Max Kolb

The pay-off is the downhill run. To master the slopes with graceful turns and skis in natural parallel position is the dream for which every skier is working.

SIG BUCHMAYR

On the headwall
Tuckerman's Ravine, N. H.

Starting on the way home.

2003.108.1